

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A computer implemented method, comprising:
receiving a selection of a portion of a first query having a plurality of portions, wherein the first query comprises an abstract query posed against a database abstraction model for a physical database;
annotating the selected portion of the first query by operation of one or more computer processors and responsive to receiving, via an interface: (i) an annotation for the selected portion of the first query and (ii) a request to annotate the selected portion of the first query with the annotation; and
receiving a suggested substitution for the annotated portion of the first query; and
storing, on a storage medium, the annotation and the suggested substitution with a reference to the selected annotated portion of the first query, wherein the interface is configured to present the annotation in conjunction with the suggested substitution and to allow a user composing a second query to replace, in the second query, the annotated portion with the suggested substitution.
2. (Currently Amended) The method of claim 1, wherein the selected portion of the first query comprises one or more query conditions.
3. (Currently Amended) The method of claim 1, wherein the selected portion of the first query comprises one or more instance values of data, where instance values are any particular value inputted in a field.
4. (Currently Amended) The method of claim 1, further comprising:
providing an interface for building the first query by specifying query portions; and

wherein receiving an indication of the selected portion of the first query comprises receiving a user selection of one or more query portions specified, via the interface, for use in the first query.

5. (Currently Amended) The method of claim 1, further comprising providing an interface allowing [[the]] a user composing the first query to create [[a]] the suggested substitution for the selected portion of the first query, the suggested substitution being selectable to replace the selected portion of the query.

6. (Currently Amended) The method of claim 1, wherein storing the annotation with a reference to the portion of the first query comprises:
decomposing the portion of the first query into one or more fragments; and
storing the fragments with the annotation.

7. (Currently Amended) The method of claim 1, wherein storing the annotation with a reference to the portion of the first query comprises:
substituting a parameter marker for an instance value contained in the portion of the first query; and
storing the portion of the first query with the parameter marker with the annotation.

8-17. (Canceled)

18. (Currently Amended) A computer-readable storage medium containing a program which, when executed by a processor, performs operations comprising:
receiving a selection of a portion of a first query having a plurality of portions, wherein the query comprises an abstract query posed against a database abstraction model for a physical database;

annotating the selected portion of the first query responsive to receiving, via an interface: (i) an annotation for the selected portion of the first query and (ii) a request to annotate the selected portion of the first query with the annotation; and
receiving a suggested substitution for the annotated portion of the first query; and
storing, on a storage device, the annotation and the suggested substitution with a
reference to the selected annotated portion of the first query, wherein the interface is
configured to present the annotation in conjunction with the suggested substitution and
to allow a user composing a second query to replace, in the second query, the
annotated portion with the suggested substitution.

19. (Currently Amended) The computer-readable medium of claim 18, wherein the operations further comprise providing an interface allowing [[the]] a user composing the first query to create [[a]] the suggested substitution for the selected portion of the first query.

20. (Currently Amended) The computer-readable medium of claim 18, wherein storing the annotation with a reference to the portion of the first query comprises:
substituting a parameter marker for an instance value contained in the portion of the first query; and
storing the portion of the first query with the parameter marker with the annotation.

21. (Currently Amended) The computer-readable medium of claim 18, wherein the operations further comprise:
monitoring one or more query portions specified for use in [[a]] the second query;
searching for annotations associated with the one or more query portions; and
providing an indication of one or more annotations, if found, associated with the one or more query portions.

22-29. (Canceled)

30. (Currently Amended) A computer implemented method, comprising:
receiving a selection of a portion of a first query having a plurality of portions,
wherein the first query comprises an abstract query posed against a database
abstraction model for a physical database;
providing an interface allowing a user composing the first query to create an
annotation and request to annotate the selected portion of the first query with the
annotation;
by operation of one or more computer processors and in response to receiving
the annotation and the request, annotating the selected portion of the first query with the
annotation by storing, on a storage medium, the annotation with a reference to the
selected portion of the first query;
receiving, from the user composing the first query, a suggested substitution for
the annotated portion of the first query;
associating the suggested substitution with the annotated portion of the first
query, wherein the interface is configured to present the annotation in conjunction with
the suggested substitution and to allow a user composing a second query to replace, in
the second query, the annotated portion with the suggested substitution;
monitoring one or more query portions specified for use in [[a]] the second query
being composed in a query building interface;
searching for stored annotations associated with the one or more query portions;
and
outputting an indication of one or more annotations, if found, associated with the
one or more query portions.

31. (Currently Amended) The method of claim 1, wherein the first query
comprises a database query.

32. (Currently Amended) The method of claim 1, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

33. (Canceled)

34. (Previously Presented) The method of claim 1, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

35. (Previously Presented) The method of claim 34, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.

36. (Currently Amended) The computer-readable medium of claim 18, wherein the first query comprises a database query.

37. (Currently Amended) The computer-readable medium of claim 18, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

38. (Previously Presented) The computer-readable medium of claim 18, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

39. (Previously Presented) The computer-readable medium of claim 38, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.

40. (Currently Amended) The method of claim 30, wherein the first query comprises a database query.

41. (Currently Amended) The method of claim 30, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

42. (Previously Presented) The method of claim 30, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

43. (Previously Presented) The method of claim 42, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.